(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 24.01.2001 Bulletin 2001/04

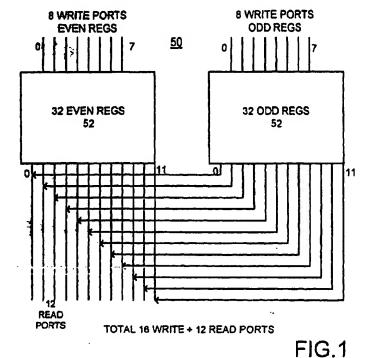
(51) Int Cl.7: G06F 9/30, G06F 9/38

- (43) Date of publication A2: 04.12.1996 Bulletin 1996/49
- (21) Application number: 96480056.9
- (22) Date of filing: 07.05.1996
- (84) Designated Contracting States: **DE FR GB**
- (30) Priority: 02.06.1995 US 459490
- (71) Applicant: International Business Machines Corporation Armonk, N.Y. 10504 (US)
- (72) Inventor: Luick, David Arnold Rochester, Minnesota 55906 (US)
- (74) Representative: de Pena, Alain et al Compagnie IBM France Département de Propriété Intellectuelle 06610 La Gaude (FR)

(54) Multiple port register file with interleaved write ports

(57) A high speed register file is provided for use with Very Long Word Instruction (VLIW) and N-way superscaler processors. The high speed register file includes a selected number of copies of a general purpose register (GPR) building block. The GPR building block

includes at least two interleaved sub-banks of registers. Each of the sub-banks includes a number N of write ports and a number M of read ports. The sub-banks are interleaved by write ports and have non-interleaved read ports.



EP 0 745 933 A3



EUROPEAN SEARCH REPORT

Application Number EP 96 48 0056

		ERED TO BE RELEVANT		
Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP 0 325 310 A (PHI 26 July 1989 (1989- * column 7, line 51		1,8	G06F9/30 G06F9/38
A	US 5 392 411 A (OZA 21 February 1995 (1 * column 4, line 53 figures 2,3 *		1,2,5,7	
A	PATENT ABSTRACTS OF vol. 017, no. 692 (17 December 1993 (1 & JP 05 233281 A (T 10 September 1993 (* abstract *	P-1663), 993-12-17) OSHIBA CORP),	1,3,4,9	
				TECHNICAL FIELDS SEARCHED (Imt.Cl.6)
				G06F
	The present search report has			<u> </u>
	Place of search THE HACITE	Date of completion of the search 30 November 200	0 00	Examiner Chalakic T
X:par Y:par doc	THE HAGUE CATEGORY OF CITED DOCUMENTS TURNING THE STATE OF THE STATE	T: theory or princ E: earlier patent after the filling O: document cate	iple underlying the document, but put	dished on, or
Q: nor	hnological background n-written disclosure irmediate document			ily, corresponding

EP 0 745 933 A3

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 96 48 0056

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

30-11-2000

Patent document cited in search repo		Publication date		Patent family member(s)	Publication date
EP 0325310	A	26-07-1989	NL DE DE ES FI HK JP US	8800053 A 68909425 D 68909425 T 2047103 T 890066 A,B, 20295 A 1217575 A 5692139 A 5103311 A	01-08-1989 04-11-1999 07-04-1999 16-02-1999 12-07-1989 24-02-1999 31-08-1989 25-11-1999 07-04-1999
US 5392411	Α	21-02-1995	JP JP	2823767 B 5282147 A	11-11-199 29-10-199
JP 05233281	Α	10-09-1993	US	5530817 A	25-06-199
	٠				

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82